

VOL'FSON, F.I.; LUKIN, L.I.; DYUKOV, A.I.; KUSHNAREV, I.P.; PEK, A.V.;
 RYBALOV, B.L.; SONYUSHKIN, Ye.P.; KHOROSHILOV, L.V.; CHERNYSHEV,
 V.F.; BIRYUKOV, V.I.; GARMASH, A.A.; DRUZHININ, A.V.; KARAMYAN,
 K.A.; KUZNETSOV, K.F.; LOZOVSKIY, V.I.; MALINOVSKIY, Ye.P.;
 NEVSKIY, V.A.; PAVLOV, N.V.; ROMENSON, B.M.; SAMONOV, I.Z.;
 SIDORENKO, A.V. [deceased]; SOPKO, P.F.; CHEGLOKOV, S.V.; YUDIN,
 B.A.; KREYTER, V.M., doktor geologo-mineral.nauk, retsenzent; ..
 KOTLYAR, V.N., doktor geologo-mineral.nauk, retsenzent; GRUSHEVOY, .
 V.G.; doktor geologo-mineral.nauk, retsenzent; NAKOVNIK, N.I., doktor
 geologo-mineral.nauk, retsenzent; KUREK, N.N., doktor geologo-mineral.
 nauk, retsenzent; LIIGEN'KIY, S.N., retsenzent; SHATALOV, Ye.T., doktor
 geologo-mineral.nauk, red.; KRISTAL'NIY, B.V., red.; SERGEYEVA, N.A.,
 red.izd-va; GUROVA, O.A., tekhn.red.

[Basic problems and methods of studying structures of ore provinces
 (Continued on next card)]

VOL'FSON, P.I.---(continued) Card 2.

and deposits] Osnovnye voprosy i metody izucheniya struktur rudnykh polei i mestorozhdenii. Moskva, Gos.nauchno-tekhn.izd-vo lit-ry po geol. i okhrane nedr, 1960. 623 p.

(MIRA 13:11)

1. Akademiya nauk SSSR. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii. 2. Moskovskiy institut tsvetnykh metallov i zolota (for Dyukov, Biryukov, Druzhinin, Kuznetsov). 3. Institut mineralogii, geokhimii i kristallografii redkikh elementov AN SSSR (for Germash). 4. Akademiya nauk Armyanskoy SSR (for Karamyan). 5. Baleyzoloto (for Sidorenko). 6. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralogii i geokhimii AN SSSR (for Malinovskiy, Nevskiy, Pavlov, Chernyshev). 7. Moskovskiy geologorazvedochnyy institut im. S.Ordzhonikidze (for Ronenson). 8. Vsesoyuznyy nauchno-issledovatel'skiy institut mineral'nogo syr'ya (for Samonov). 9. Voronezhskiy universitet (for Sopko). 10. Kol'skiy filial AN SSSR (for Yudin).

(Ore deposits)

BAYMUKHAMEDOV, Kh.N.; VOL'FSON, P.I.; ZAKIROV, T.Z.; KOROLEV, V.A.;
KREYTER, V.M.; KUSHNAREV, I.P.; LUKIN, L.I.; NEVSKIY, V.A.;
NIKIFOROV, N.A.; PEK, A.K.; RUSANOVA, O.D.; SONYUSHKIN, Ye.P.;
CHERNYSHEV, V.F.; SHEKHTMAN, P.A.

Aleksei Vasil'evich Korolev; obituary. Geol. rud. mestorozh.
no.4:134-135 J1-Ag '60. (MIRA 13:8)
(Korolev, Aleksei Vasil'evich, 1897-1960)

KUSHNAREV, I.P.

Depth of the formation of endogenous deposits in the Kurama structural-facies zone and the role of erosion level in their formation. Geol.rud.mestorozh. no.6:3-26 N-D '61.

(MIRA 14:12)

1. Institut geologii rudnykh mestorozhdeniy, petrografii, mineralologii i geokhimii AN SSSR.

(Kurama Range Region--Ore deposits)

S/081/62/000/010/033/085
3168/B180

AUTHORS: Tol'fson, F. I., Kushnarev, I. P., Lukin, S. I.,
Smorchkov, I. Ye., Sonyushkin, Ye. P., Ushakov, A. I.

TITLE: Some problems concerning the formation of hydrothermal
uranium deposits

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 10, 1962, 117,
abstract 10C111 (Izv. vyssh. uchebn. zavedeniy. Geol. i
razvedka, no. 2, 1961, 12-24)

TEXT: A geological study of samples from hydrothermal uranium deposits
from various provinces shows that they have many genetic features in
common. The uranium-bearing provinces are characterized by many stages
of magmatism. Uranium mineralization is due to plutonic pockets of
granite magma in the final stage of development. Large-scale chemical
analyses for one of the provinces showed the mean uranium content of the
Early Hercynian magma complex to be $2.2 \cdot 10^{-4}\%$, that of the Middle
Hercynian $4.6 \cdot 10^{-4}\%$ and that of the Late Hercynian $6.5 \cdot 10^{-4}\%$. In each
separate intrusive complex the quantity of uranium is greater in the

Card 1/2

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B168/B180

Some problems concerning the ...

younger rocks. Uranium mineralization occurs during one of the final stages of the hydrothermal process. The principal paragenetic associations of pitchblende are pitch-sulfide, pitch-carbonate, pitch-fluorite and pitch-quartz-pyrites. The first two associations are typical of uranium deposits properly speaking. Uranium can be transported in hydrothermal solutions in tetravalent and hexavalent forms, passing through the stages of true and colloidal solutions. The optimum conditions for the formation of the upper part of uranium deposits are found at 500-700 m from the former surface of the earth with a possible vertical mineralization range of up to 1800 m. Deposition of the ores is accompanied by silicification, chloritization, albitization and sericitization of the enclosing rocks. Albitization is typical of the upper parts of uranium ore-bodies. The temperature at which the ores form is found to be 150-200°C. [Abstracter's note: Complete translation.] ✓

Card 2/2

KUSHNAREV, I.P.; KAZHDAN, A.D.

Letter to the editorial office. Izv.AN SSSR Ser.geol.⁷⁶
no.12:113-114. D '61. (MIRA ~~17/82~~)
(Tien Shan--Geology, Stratigraphic)
(Tien Shan--Volcanoes)

LUKIN, Leonid Ivanovich; CHERNYSHEV, Vadim Fedorovich; KUSHNAREV,
Ivan Pavlovich; PEK, A.V., otv. red.

[Microstructural analysis; methodological textbook for
geologists studying ore deposits] Mikrostrukturnyi ana-
liz; metodicheskoe posobie dlia geologov, izuchaiushchikh
rudnye mestorozhdeniia. Moskva, Nauka, 1965. 123 p.
____[Supplement] Prilozhenie I-XII. diags. (in folder)
(MIRA 19:1)

L 50190-65 EPA(s)-2 /EWT(m)/EPT(n)-2/T/ENP(t)/ENP(b)/EDA(c) Pu-4
 TOP(c) WTH/ES/JD/MA/JG
 AH5014982 BOOK EXPLOITATION UR/553.061:546.79

Datulin, S. G.; Golovin, YE. A.; Zelenova, O. I.; Kashirtseva, M. F.;
 Konarova, G. V.; Kondrat'yeva, I. A.; Lisitsin, A. K.; Perel'man,
 A. I.; Sindel'nikova, V. D.; Chernikov, A. A.; Shmarlovich, YE. M.

Exogenous epigenetic deposits of uranium; formation conditions
 (Ekzonennyye epigeneticheskiye mestorozhdeniya urana; usloviya
 obrazovaniya). Moscow, Atomizdat, 1965. 321 p. illus., biblio.
 Errata slip inserted. 1100 copies printed.

TOPIC TAGS: deposit formation, epigenetic theory, exodiagenetic
 deposit, surface uranium accumulation, uranium bituminous deposit,
 uranium deposit, uranium, nuclear fuel. 19

PURPOSE AND COVERAGE: This book is intended for readers specializing
 in the geology of ore deposits, in particular for those concerned
 with atomic raw materials, and also for students of higher-education
 institutions. In the book, for the first time in Soviet and
 foreign literatures, the epigenetic theory of uranium-deposit
 formation is expounded. Many Soviet and foreign source materials

Card 1/4

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13

have been used in this book, and some of the investigations carried out by the present authors are published in this book for the first time. Several names of Soviet scientists working in this field are mentioned. V. A. Uspenskiy collaborated on Ch. X, and M. A. Viselkina on Ch. III. The authors thank A. A. Saukov, deceased, Corresponding Member Academy of Sciences USSR, and F. I. Vol'fson, D. G. Sapozhnikov, V. I. Gerasimovskiy, M. F. Strclkin, G. S. Gritsayenko, and I. P. Kushnarev, Doctors of Geologico-Mineralogic Sciences; V. I. Danchey, Candidate of Geologico-Mineralogic Sciences, and N. A. Volokovykh. There are about 12 pages of references of which about 3/4 are Soviet.

TABLE OF CONTENTS [abridged]:

Introduction -- 4

Ch. I. Epigenetic processes in hypergenesis zone -- 9

Ch. II. Chemistry and crystallochemistry of uranium compounds -- 22

Cord 2/A

L 50199-65

AK5014982

- 0
- Ch. III. Associations of nonoxidized uranium minerals in epigenetic deposits -- 37
 - Ch. IV. Uranium in surface and ground waters -- 48
 - Ch. V. Uranium in stratal waters -- 57
 - Ch. VI. Classification of exogenous uranium deposits -- 83
 - Ch. VII. Exodiagenetic deposits (Type 5) -- 113
 - Ch. VIII. Deposits of Oxygenous sheet oxidation (Type 6) -- 133
 - Ch. IX. Deposits of oxygen-free oxidation (Type 7). Deposits in oil-bearing carbonate rocks -- 180
 - Ch. X. Uranium-bituminous deposits in nonmetamorphosed sedimentary rocks -- 213

Card 3/4

L 50199-65

AM5014982

Ch. XI. On surface uranium accumulations in regions with arid climate -- 232

Ch. XII. Zone of oxidation in epigenetic deposits -- 239

Conclusion -- 275

References -- 309

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OTHER: 118

Card 4/4

ISAYEV, Ye.I.; KUSHNAREV, I.T.; TARAPAY, M.A.; YAKOVLEV, Yu.N.;
LAPITSKIY, V.I., prof., doktor tekhn.nauk, nauchnyy rukovo-
ditel' raboty

Developing an efficient type of nozzle and stopper for the
continuous casting of steel. Izv.vys.ucheb.zav.; Chern.Met.
6 no.1:42-49 '63. (MIRA 16:2)

1. Dnepropetrovskiy metallurgicheskiy institut.
(Continuous casting--Equipment and supplies)

LAPITSKIY, V.I.; TARAPAY, M.A.; OKHOTSKIY, V.R.; LAYKO, B.G.; FIRER, L.M.
Prinimali uchastiye: SESYUK, G.S. [deceased]; KUSHNAREV, I.T.;
PATLAN', Ye.F.; PITOSHNIHENKO, G.P.; SOSEDKO, P.M.

Ways of reducing wheel discards because of angular segregation.
Izv. vys. ucheb. zav.; Chern. met. 7 no.7:84-89 '64
(MIRA 17:8)

1. Dnepropetrovskiy metallurgicheskiy institut i Zavod im.
K. Libknekhta.

YAKOVLEV, Yu.N., kand. tekhn. nauk; KUSHNAREV, I.T.; LAPITSKIY, V.I.,
doktor tekhn. nauk, rukovoditel' raboty

Hot longitudinal cracks on flat, continuous ingots. Met. 1
gornorud. prom. no.4:31-35 J1-Ag '64. (MIRA 18:7)

KUSHNAREV, L. N.

PA 4T28

USSR/Welding, Arc

Mar 1947

"Investigation of Arc Welding under a Flux,"
L. N. Kushnarev, 5 pp

"Avtogennoye Delo" No 3

Illustrated with oscillograms of the arc. The conclusion, among others, is reached that there are no short circuits under normal operating conditions in welding, but with very short arcs under a flux, as well as with an open arc, they are noted, but are not as protracted.

4T28

KUSHNAREV, L.A.

137-58-5-9747

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 128 (USSR)

AUTHORS: Benua, F.F., Demyantsevich, V.P., Kushnarev, L.N.

TITLE: Novel Developments in the Automation and Mechanization of Electric Arc and Slag Welding (Novoye v oblasti avtomatizatsii i mekhanizatsii protsessov elektricheskoy dugovoy i shlakovoy svarki)

PERIODICAL: V sb.. Svarochnoye proiz-vo. Leningrad, Lenizdat, 1957, pp 17-37

ABSTRACT: The results of a number of investigations and production studies of automation and mechanization of welding processes are communicated. 1. An investigation of the effect of electrode diameter (current density) on the melting of the parent and the electrode metal. An increase in current density improves the efficiency of the processes of fusion of the product and the electrode. Thus, for wire of 2-mm diameter, an increase in current from 300 to 600 amps changes the share of the heat expenditure required to melt the parent metal from 15 to 28%, that for the electrode from 12 to 19.8%, that for the flux from 36.8 to 29.2% and that going into heat dissipation from 36.2 to 28.6%;

Card 1/3

137-58-5-9747

Novel Developments in the (cont.)

this results in an increase in the deposition efficiency and the depth of penetration. 2. Development of a procedure of automatic submerged slag welding of parts of large cross section at high current densities by electrodes 1.6-3 mm in diameter. The joint is held in a detachable copper or ceramic form. The tips of the automatic welder go into the gap (20-25 mm) until they are 50-70 mm apart. About 30 or 40 sec after welding starts, the arc process converts to a slag process. Filler metal added to the liquid bath diminishes its temperature, inhibits grain growth and raises the α_{K} from 1.7 to 8.1-12.5 kgm/cm² (Sv08A electrode, OSTs-45 flux). The power supply circuit from the 1st to the 4th electrode (E) and technical and cost criteria for the process are presented. 3. Development of a procedure of flat-position automatic slag welding of sheets >20 mm in diameter. The welding is done on a Cu backing with a groove 20 mm wide and 5 deep, the gap between the edges of the sheets being 12-16 mm. 3 E spaced 30 mm apart are used, the first being an 8-mm tungsten tip, and the others consumable 2-mm types. The W E is powered by 32-38-v D-C. The consumable E are powered from 2 STE-34 transformers in open delta network. 4. A search for an efficient method of automatic surfacing. It was found that the highest output was attainable with single-phase, two-electrode, three-arc facing, with 2-mm diameter E fed from a single STE-34 transformer (7.8-19.5 kg metal applied per hour). Card 2/3

137-58-5-9747

Novel Developments in the (cont.)

5. The development, for the processes described, of special 2-electrode automatic and semiautomatic welders of the following model designations: DEShA - LIIVT-5, DEShP-LIIVT-5, DEA-2, and ADSD-500. 6. An investigation of the effect of the schedule in CO₂ welding with small-diameter electrodes, and the development of designs for automatic equipment for this type of welding. 7. Development of equipment for mass production of oil transformer housing of various models and sizes.

V.S.

1. Arc welding--Control

Card 3/3

KUSHNAREV, M. A.

"Elements of Variability in the Golden Staphylococcus," Mikrobiol Zhur, Kiev, 1950, Vol XII, No. 1.

Mikrobiologiya, Vol XX, No. 5, 1951. ■-W-24635.

SLIFCHENKO, P.S., glav. red.; KUCHERENKO, K.R., red.; FILOMTEO,
K.I., red.; LESNAYA, A.A., red.; ASYZOV, A.G., red.;
BUDNIKOV, M.S., red.; VETROV, Yu.A., red.; GLADKIY, V.I.,
red.; GOLOSOV, V.A., red.; IZMAYLOV, V.G., red.; KANYUKA,
N.S., red.; KAPOV, E.A., red.; KLINDUKH A.M., red.;
KUSHNAREV, N.Ye., red.; LUYK, A.I. kand. tekhn. nauk,
red.; NEMENKO, L.A., red.; RYBAL'SKIY, V.I., red.; SITNIK,
I.P., red.; FEDOSENKO, N.M., red.; FILAKHTOV, A.L., kand.
tekhn. nauk, red.; KHILOBOCHENKO, K.S., red.; VORONKOVA,
L.V., red.; KIYANICHENKO, N.S., red.

[Construction industry: technology and mechanization of the
construction industry; the economics and organization of
construction] Stroitel'noe proizvodstvo: tekhnologiya i me-
khanizatsiya stroitel'nogo proizvodstva; ekonomika i orga-
nizatsiya stroitel'stva. Kiev, Budivel'nyk, 1965. 180 p.
(MIRA 18:4)

1. Nauchno-issledovatel'skiy institut stroitel'nogo proiz-
vodstva. 2. Nauchno-issledovatel'skiy institut stroitel'-
nogo proizvodstva (for Luyk, Filakhtov).

KUSHNAREV, S. I., Docent

S. I. Kushnarev
"Preparing Locomotives and Equipment for Winter and Organization
of Operations Under Winter Conditions." Sub 27 Jun 47, Moscow Order
of the Labor Red Banner Electromechanical Inst of Railroad Engineer
imeni F. E. Dzerzhinskiy

Dissertations presented for degrees in science and engineering
in Moscow in 1947

SO: Sum No. 457, 18 Apr 55

KUSHNAREV, V.A.

Taking care of the bulis, premises and
ship installations of the steel vessels.
The food promotion publishing house, Moscow, 1941.

KUSHNAREV, V. A.

Technology

Fishing boats maintenance and their repair by ship(s crew afloat. Moskva,
Rishchepromizdat, 1951

9. Monthly List of Russian Accessions, Library of Congress, August 1952, Uncl.

9. Monthly List of Russian Accessions, Library of Congress, February 1953. Unclassified.

KUSHNAREV, V.A.

[Practical seamanship aboard vessels of the fishing industry]
Morskaya praktika na sudakh rybnoipromyshlennosti. Moskva, Pishche-
promizdat. Vol. 1953. 366 p. (MLRA 7:6)
(Merchant seamen--Handbooks, manuals, etc.)
(Fishing boats)

VYSHNEPOL'SKIY, S.A.; KUSHNAREV, V.A., redaktor.

[World sea routes and merchant marines] Mirovye morskije puti
i sudokhodstvo. Moskva, Gos. izd-vo geogr. lit-ry, 1953. 455 p.
(MLRA 7:3)
(Trade routes) (Shipping)

KUSHNAREV, V.A.

Navigation at sea in the ice-locked tracts.
Rybnos khozyaystvo (Fish Economy), issue No. 11,
1952 and Issue No. 1, 1953.

KUSINAREVA, V. A.

Navigation

Navigation in icy waters (conclusion). Ryb. khoz. 29 no. 1, 1953

9. Monthly List of Russian Accessions, Library of Congress, May 1953. Unclassified.

KUSHNAREV, V.A.; KONDRAT'YEVA, Ye.M., redaktor; KISINA, Ye.I., tekhnicheskii redaktor

[Practical seamanship aboard vessels of the fishing industry]
Morskaiia praktika na sudakh rybnoi promyshlennosti. Moskva, Pishchepromizdat. Pt. 2. 1954. 298 p. tables. (MLRA 8:6)
(Fishing boats) (Navigation)

PLINER, A.I.; KUSHNAREV, V.A.

Temperature control ofovens with wide-open top dampers. Koks i
khim.no.4:63 '56. (MLRA 9:9)

1.Yenakiyevskiy keksekhimicheskiy zaved.
(Coke ovens)

KUSHNAREV, Vasilii Afanas'yevich; KUZ'MINA, V.S., red.; SOKOLOVA, I.A.,
tekhn.red.

[Seamanship on fishing vessels] Morskaya praktika na sudakh
rybnoi promyshlennosti. Izd.2., perer. Moskva, Fishchepromizdat,
1958. 498 p. (MIRA 12:8)
(Fishing boats)

KUSHNAREV, V. K.

57-10-26/33

AUTHORS: Parfent'yev, A. I., and Kushnarev, V. K.

TITLE: A More Exact Definition of the Conception of Coercive Force
(Utochneniye ponyatiya koertsitivnoy sily).

PERIODICAL: Zhurnal Tekhn. Fiz., 1957, Vol. 27, Nr 10, pp. 2388-2391 (USSR).

ABSTRACT: The authors show that a complete characteristic of the coercive properties of a magnetic material is given by three hysteresis loops. From these three we can obtain three different values for the coercive force. The three boundary loops of magnetic hysteresis are given here - induction, magnetization and residual induction or residual magnetization; once they are given for the ferromagnetic γ -ferrous oxide powder for band recordings and the other time they are given for the iron-cobalt-ferrite powder for the band recordings. The different values of B^H_C , I^H_C , B^H_C are dependent on the different magnetic

states of the sample at the moment of the passage of the curves $B = f_1(H)$, $I = f_2(H)$ and $B_r = f_3(H)$ through zero. B - the induction, I - the magnetization, B_r - the residual induction, H - the magnetic field. B^H_C - the coercive force for induction, I^H_C - the coercive force for the magnetization, B^H_C - the coercive force for the residual mag-

Card 1/2

A More Exact Definition of the Conception of Coercive Force. 57-lo-26/33

netization. The authors point out that the three magnetic states of the material which correspond to the values of the demagnetization field $-H_C$, $-I_H$ and $-H_C$ are not sufficiently stabile. Therefore for the characterization of the material that value of coercive force can be used for the classification of the properties of the material which, from the point of view of the technical use of the material, suits best for this purpose. There are 3 illustrations, 1 table and 7 Slavic references.

ASSOCIATION: Cinema-Photographic Institute, Moscow (Kinofotoinstitut. Moskva).

SUBMITTED: November 5, 1956.

AVAILABLE: Library of Congress.

Card 2/2

PERSON, R.S.; KUSHNAREV, V.M.

Problems in the interpretation of the electromyogram. Report
No.2: Average frequency of the sequence of potential fluctuations
in the interference electromyogram. Biofizika 8 no.2:238-241 '63.

(MIRA 17:10)

1. Tsentral'nyy nauchno-issledovatel'skiy institut ekspertizy
truda, posobnosti i organizatsii truda invalidov, Moskva, i
Instit. vysshey nervnoy deyatel'nosti i neyrofiziologii AN
SSSR, Moskva.

KUSHNAREV, V.M.

- Problems of infectious pathology in works of A.A. Charukovskii,
1798-1848. Zhur.mikrobiol. epid. i immun. 29 no.9:134-137 8'58
(MIRA 11:10).
1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei AMN SSSR.
(MICROBIOLOGY, history
contribution of A.A.Charukovskii (Rus))
(BIOGRAPHIES,
Charukovskii, A.A. (Rus))

KUSHNAREV, V.M.

Changes occurring in the bacterial cell during the preparation of ultrathin sections. Mikrobiologiya 28 no.6:819-823 N-D '59.

(MIRA 13:4)

1. Institut epidemiologii i mikrobiologii im. N.F. Gamaleya
AMN SSSR.

(ESCHERICHIA COLI)

KUSHNAREV, V.M.

Jon Cantacuzene, 1863-1934. Zhur.mikrobiol., epid. i immun. 30
no.12:128-130 D '59. (MIRA 13:5)

1. Iz Instituta epidemiologii i mikrobiologii imeni Gamalei
AMN SSSR.

(BIOGRAPHIES)

KUSHNAREV, V.M.; BLAGOVESHCHENSKIY V.A.

Effect of freeze-drying on succinic dehydrogenase activity of
Escherichia coli. Biokhimiia 25 no.4:599-602 J1-Ag '60.
(MIRA 13:11)

1. Department of Dry Preparations and Department of Biochemistry,
Institute of Epidemiology and Microbiology, Academy of Sciences of
the U.S.S.R., Moscow.

(FREEZE-DRYING)

(ESCHERICHIA COLI)

(SUCCINIC DEHYDROGENASE)

KUSHNAREV, V.M.

Detection of the centers of activity of succinic dehydrogenase in
Escherichia coli. Biul. eksp. i biol. med. 50 no. 8:106-107 Ag '60.
(MIRA 13:10)

1. Iz otdela sukhikh biopreparatov i laboratorii lyuminescentnoy
i elektronnoy mikroskopii Instituta epidemiologii i mikrobiologii
imeni N.F. Gamalei (dir. - prof. S.N. Muromtsev) AMN SSSR, Moskva.
Predstavlena deystv. chlenom AMN SSSR V.V. Zakusovym.
(SUCCINIC DEHYDROGENASE) (ESCHERICHIA COLI)

KUSHNAREV, V. M., Cand Med Sci -- "Biochemical and cytologi-
cal ^{modifications} ~~changes~~ of the bacterial cell ^{upon} ~~to~~ freezing and drying."
Mos, 1961. (Acad Med Sci USSR) (KL, 8-61, 262)

- 482 -

KUSHNAREV, V.M.; CHEL'NIY, A.M.

Pyrogenicity of sera and methods of its determination. Nauch. ozn.
preisv. bakt. prep. 10:213-219 '61. (MIRA 18:7)

1. Institut epidemiologii i mikrobiologii im. Gazalei AMN SSSR.

KUSHNAREV, V.M.; BLAGOVESHCHENSKIY, V.A.

Effect of freeze-drying on the succinic dehydrogenase activity of bacteria. Biokhimiia 26 no.4:688-693 J1-Ag '61. (MIRA 15:6)

1. Department of Drying of Biological Preparations and Department of Microbe Biochemistry, Institute of Epidemiology and Microbiology, Academy of Medical Sciences of the USSR, Moscow.
(SUCCINIC DEHYDROGENASE) (BACTERIA, PATHOGENIC)
(FREEZE-DRYING)

KUSHNAREV, V.M.

Mitochondrial equivalents in Escherichia coli cells. Biul. eksp.
biol. i med. 3[1.8.53] no.3:65-67 Mr '62. (MIRA 15:4)

1. Iz Instituta epidemiologii i mikrobiologii imeni N.F.Gamalei
AMN SSSR, Moskva. Predstavlena deystvitel'nyy chlenom AMN SSSR
V.L.Troitskim.

(ESCHERICHIA COLI)

(MITOCHONDRIA)

KUSHNAREV, V.M.; BLAGOVESHCHENSKIY, V.A.

Characteristics of the succinic dehydrogenase activity of
Escherichia coli as related to its resistance to freeze-drying
Mikrobiologiya 32 no.1:17-19 '63 (MIRA 17:3)

1. Institut epidemiologii i mikrobiologii imeni Gamalei.

PASHKOV, Ye.P.; KUSHNAREV, V.M.; SMIRNOVA, T.A.

Electron microscopic study on the effect of antibiotics on *Staphylococcus aureus*. Antibiotiki 10 no.6:538-543 Je '65. (MIRA 18:7)

1. Kafedra mikrobiologii I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M.Sechenova i Laboratoriya fizicheskikh metodov issledovaniy Moskovskogo instituta vaktsin i syvorotok im. I.I.Mechnikova.

KORN, M.Ya.; KUSHNAREV, V.M.

Effect of tetrazolium salts on the reproduction of bacteria.
Mikrobiologiya 34 no.3:469-472 My-Ju '65.

(NIRA 18:11)

1. Institut epidemiologii i mikrobiologii imeni N.P.Gamalei
AMN SSSR.

KUSHNAREV, V.M.

Structure and function of the cytoplasmic membrane in bacteria.
Zhur. mikrobiol., epid. i immun. 43 no. 1:98-103 Ja '66
(MIRA 19:1)

1. Moskovskiy institut vaktsin i syvorotok imeni Mechnikova.
Submitted June 18, 1965.

KUSHNAREV, Ya.

Volunteers at the tobacco state farm. Pozh. delo 4 no.1:10 Ja '58.

(MIRA 11:1)

1. Nachal'nik dobrovol'noy pozharney druzhiny Tabaksovkhoza Alma-Atinskoy oblasti.

(Alma-Ata Province--State farms--Fires and fire prevention)

KUSHNAREV, Ye.

Plans of Kruzenshtern's around the world voyage. Mor. flot 22
no.2:41-42 F '62. (MIRA 15:4)

1. Uchenyy sekretar' TSentral'nogo voyenno-morskogo muzeya.
(Voyages around the world)

KUSHNAREV, Ye.

I.F. Aleksandrovskii's submarine. Sov. mor. 16 no.15:21 Ag '56.
(Submarine boats) (MLRA 10:1)

KUSHNAREV, Ye.G.

Kruzenshtern's plan for a voyage around the world; based on new
archive materials. Izv. Vses. geog. ob-va 95 no.4:339-347
Jl-Ag '63. (MIRA 16:9)
(Kruzenshtern, Ivan Fedorovich, 1770-1846)
(Voyages around the world)

KUSHNAREV, Yu. L.

Voluntary design offices in enterprises of the Moscow Economic
Council. Biul. tekhn.-ekon. inform. Gos. nauch.-issl. inst.
nauch. i tekhn. inform. no.12:73-74 '62. (MIRA 16:1)

(Moscow—Industrial management)

KUSHNAREV, Yu.L.

USSR

Voluntary designers help agriculture. Mashinostroitel'
no.9:7 S '62. (MIRA 15:9)
(Moscow Province--Farm mechanization)

n 1 1043-66

ACC NR: AR6000415

SOURCE CODE: UR/0271/65/000/009/1076/1076

SOURCE: Ref. zh. Avtomatika, telemekhanika i vychislitel'naya tekhnika, Abs. 9A581

AUTHOR: Kushnarev, Yu. M. *17 B*

TITLE: Experimental investigation of pilot-cable electromagnetic field and shipborne automatic equipment *55*

CITED SOURCE: Tr. Gor'kovsk. in-ta inzh. vodn. transp., vyp. 61, 1964, 45-57 *55*

TOPIC TAGS: pilot cable, ship navigation

TRANSLATION: The shipborne equipment developed for automating the pilot-cable ship navigation is described. Frame-type coils are used as sensors. Formulas for the emf induced in the coil are given, as well as experimental curves determined for various coils. Also characteristics of the coil-signal preamplifiers are presented; their gain can be continuously adjusted from 0 to 5×10^4 . The entire automatic equipment of the pilot-cable system forms a closed-loop automatic control system. Bib 2, figs 5, and tab 1.

SUB CODE: 17

HW
Card 1/1

UDC: 656.605:621.315.28

ACC NR: AR6028509

(N)

SOURCE CODE: UR/0398/66/000/005/V004/V005

AUTHOR: Kushnarev, Yu. M.

TITLE: Selection of the line along which the guide cable is laid when automating control of ships and caravans

SOURCE: Ref. zh. Vodnyy transport, Abs. 5V22

REF SOURCE: Tr. Gor'kovsk. in-ta inzh. vodn. transp., vyp. 71, 1965, 31-42

TOPIC TAGS: waterway engineering, automatic control, topography

ABSTRACT: It is recommended that the introduction of a guide cable system be begun by selecting the section of a river along which the greatest economic effect can be achieved. When the selection is made, consideration must be given to the shape of the river bed, the radius of bends, the longitudinal profile of the river, the channel depth, the speed and direction of the current and the prevailing winds, and the types and numbers of ships and caravans operating on the section. The section selected is divided into a number of smaller sections characterizing the various operational difficulties. The next step is to lay down on a navigational chart the approximate movement belt, the edges of which extend to the guaranteed depths, and within the limits of which the line for laying the guide cable is to be selected. If the belt is more than 400 meters wide the guide cable for two-way movement can be laid along both sides of the axis of the selected belt at a distance of 100 to 120

Card 1/2

UDC: 656.052.011.56

ACC NR: AR6028509

meters. If the belt is less than 400 meters wide the first thing to do is to determine the required belt width. If the width of this belt is less than the width of the channel, the question decided is that of rational positioning of the line for the guide cable relative to the bed of the river, consideration being given to the use of most advantageous depths, while, if the belt is wider than the width of the channel the question to be decided involves changing the shape of the caravan being pushed, or the introduction of one-way traffic. A concrete example of line selection is given. 3 figures, 1 table. Bibliography of 7 titles. Ye. Chestnov. [Translation of abstract]

SUB CODE: 13,17

Card 2/2

ACC NR: AR6028521

(N)

SOURCE CODE: UR/0398/66/000/005/V021/V021

AUTHOR: Kushnarev, Yu. M.

TITLE: The river ship as an object of automatic control

SOURCE: Ref. zh. Vodnyy transport, Abs. 5V101

REF SOURCE: Tr. Gor'kovsk. in-ta inzh. vodn. transp., vyp. 71, 1965, 15-30

TOPIC TAGS: automatic control equipment, programmed automatic control, inland waterway transportation, ship, ship component, waterway engineering, research facility, education institute

ABSTRACT: The process of automatic movement control of a ship, which is divided into two stages, (1) maneuvering and mooring operations, and (2) movement from the point of departure to the destination point, is reviewed. It is noted that of available equipment capable of meeting the requirement for a high degree of accuracy in ship guidance, the most acceptable for river transportation is the guide cable system, which includes the guide cable, the station supplying electric power to the guide cable, and the automatic equipment installed in the ship. The guide cable, which is laid from the point of departure to the destination contains the program for automatically controlling ship movements along an assigned trajectory. The guide cable power supply stations are installed ashore at sites convenient for connecting up to the guide cable and for obtaining lead-ins from the industrial power grid. The automatic

Card 1/3

UDC: 656.61.052.011.56

ACC NR: AR6028521

equipment installed in the ship provides for automatic control of the ship's rudder according to the lateral displacement of the ship from the line along which the guide cable is laid, and for automatically controlling engine rpm in accordance with the amount of water under the ship's keel. There is a brief description of the structural schematic of the system for automatic rudder control while moving along the guide cable, of the basic equations for ship controllability, and of the investigation made of stability of operation of the system used to automatically control the rudder during movement along the guide cable line. The following conclusions are drawn: (1) the most accurate way in which to provide guidance at the present time is by use of the guide cable system; (2) the on-board automatic control system associated with the guide cable, developed by GIIVT [Gor'kiy Institute for Water Transportation Engineers], performs the regulatory operations in accordance with the law $a_p = -(k_1 y + k_2 \theta + k_3 \theta^1)$, where a is the angle the rudder makes with its DP [diametrical plane] (rad), y is the lateral displacement of the ship from the guide cable line, $k_1 - k_3$ are amplification factors for the respective units of the on-board automatic equipment, θ is the angle the ship makes with the guide cable line (rad); (3) in order to select the parameters for the on-board automatic equipment which characterize the coefficients k_1, k_2, k_3 , one must have the values for the hydrodynamic characteristics of the ships as objects of regulation, characterized by the coefficients $c_1 - c_6$; (4) the value for the coefficient k is selected first from the condition of maximum per-

Card 2/3

ACC NR: AR6028521

missible deviation of the center of gravity of the ship from the guide cable line when the ship is automatically controlled; (5) the values for the coefficients k_2 and k_3 are selected from the condition that system operation be stable while providing the necessary regulatory quality; (6) in order to create the on-board automatic equipment the respective units in the equipment should be fitted with regulatory organs which permit altering the values for the coefficients k_1 - k_3 within fixed limits. I. Makarov. [Translation of abstract]

SUB CODE: 13,17

Card 3/3

ACC NR: AR6028520

(N)

SOURCE CODE: UR/0398/66/000/005/V021/V021

AUTHOR: Kushnarev, Yu. M.

TITLE: Devices for automating the navigation process

SOURCE: Ref. zh. Vodnyy transport, Abs. 5V100

REF SOURCE: Proizv-tekhn. sb. Tekhn. upr. M-va rechn. flota RSFSR, no. 2 (46), 1965, 14-17

TOPIC TAGS: ~~shipborne automatic control system~~, inland waterway transportation, ~~anchorage facility~~, wire guidance, ship navigation, cargo ship, marine equipment, *AUTOMATION EQUIPMENT, AUTOMATIC NAVIGATOR*

ABSTRACT: Reviewed are existing equipments for automating the navigation process, providing continuous automatic determination of the ship's position, maintaining the ship on the assigned course, and providing safety of movement under any conditions of visibility and for passing clear of other ships. The following installations meet these requirements: autogyro; radionavigation systems (hyperbolic phase and pulse-phase) and guide cable systems. The guide cable systems, which provide the most accurate way in which to take a ship through a channel, and which more fully satisfy the requirements imposed on devices used to automate the navigation process, are the most desirable for the internal waterways. According to calculations made by GIIVT [Gor'kiy Institute for Water Transportation Engineers] the cost of automating navigation by the installation of a guide cable system can be amortized in 2 to 3 years.

Card 1/2

UDC: 656.61.052.002.5

ACC NR: AR6028520

V. Makarov. [Translation of abstract]

SUB CODE: 17,13

Card 2/2

KUSHNAREVA, A. G.

USSR/Medicine - Medical Societies
Medicine - Otorhinolaryngology

May/June 1949

"Account of the Work of the Armenian Department of the All-Union Society of
Otolaryngologists for 1948" 1 p

"Vest Oto-Rino-Laringol" no. 3

Seven meetings were held with Prof A. A. Arutyunyan as chairman and O. N. Oganesyan as secretary. The 24 members considered problems in the light of Michurin's theories giving 21 reports and demonstrations, among them A. G. Kushnareva's "Morphology of the Tonsils in Malaria Cases," "Leeches in the Throat," demonstrated by N. A. Meliksetyan-Asoyan, "Account of the Work of the Second All-Ukrainian Otorhinolaryngological Conference," and "Account of the Work of the Yerevan Otorhinolaryngological Clinic for Eight Years," both by the chairman.

PA 64/49T85

EXCERPTA MEDICA Sec 4 Vol 12/7 Med. Micro. July 59

2112. REGARDING THE OCCURRENCE OF INFLUENZA VIRUS IN THE CONJUNCTIVAL SECRETIONS OF INFLUENZA PATIENTS. PRELIMINARY REPORT (Russian text) - Kushnareva E. E. - VOPR. VIRUSOL. 1958, 4 (233-234)

Conjunctival secretions from several influenza patients were pooled in 1.0 ml. saline, and mixed with one drop of 20% suspension of guinea-pig red cells. Chick embryos were inoculated and incubated for 72 hr. at 35° C. Four strains of influenza virus were isolated, but their identification with known types was not established. Anigstein - Galveston, Tex. (L, 4)

DURAKINA, A.V.; KUSHNAREVA, E.E.; KUZ'MINA, A.I.; TRASHCHENKO, L.I.

Epidemiology of influenza A2 according to 1957 data from Stalingrad.
Vop. virus. 4 no.1:23-27 Ja-F'59. (MIRA 12:4)

1. Stalingradskiy nauchno-issledovatel'skiy institut epidemiologii,
mikrobiologii i gigiyeny.
(INFLUENZA, epidemiol.
A2, in Russia (Rus))

DUBAKINA, A.V.; KUSHNAREVA, E.E.

Some characteristics of the 1957 outbreak of influenza in
Stalingrad Province. Vop.virus. 4 no.2:162-164 Mr-Apr '59.
(MIRA 12:6)

1. Stalingradskiy nauchno-issledovatel'skiy institut epidemiologii,
mikrobiologii i gigiyeny.
(INFLUENZA, epidemiol.
in Russia (Rus))

KUSHNARENVA, E.E.

Laboratory diagnosis of influenza by means of virological examination of conjunctival secreta; author's abstract. Zhur, mikrobiol., epid. i immun. 30 no.12:25-26 D '59. (MIRA 13:5)

1. Is Stalingradskogo instituta epidemiologii, mikrobiologii i gigiyeny.

(CONJUNCTIVA virol.)

(INFLUENZA diag.)

DUBAKINA, A.V.; KUSHNAREVA, E.E.; KUZ'MINA, A.I.

Some data on the epidemiology and etiology of influenza during
recent years in Stalingrad. Vop. virus. 5 no. 6:751-752 N-D '60.
(MIRA 14:4)

(STALINGRAD—INFLUENZA)

KUZ'MINA, A.I.; KUSHNAREVA, E.E.; PEREL'MAN, A.L.

Description of the outbreak of infleunza in Stalingrad in
1959. Vop. virus. 5 no. 6:753 N-D '60. (MIRA 14:4)
(STALINGRAD—INFLUENZA)

KUSHNAREVA, I. P.

124-57-1-528

Translation from: Referativnyy zhurnal, Mekhanika, 1957, Nr 1, p 66 (USSR)

AUTHORS: Simonov, V. M., Kushnareva, I. P.

TITLE: The Effect of the Obliqueness of an Overpass Crossing a Body of Running Water on the Distribution of the Discharge Between Two Bridge Spans (Vliyaniye kosiny peresecheniya vodotoka perekhodom na raspredeleniye raskhoda mezhdv dvumya mostovymi otverstiyami)

PERIODICAL: Sb. stud. nauch. rabot. Saratovsk avtomob. -dor. in-t 1956, Nr 2, pp 15-27

ABSTRACT: Bibliographic entry

1. Water--Distribution 2. Bridges--Design--Effectiveness--Applications

Card 1/1

ACCESSION NR: AT4010694

S/2601/63/000/017/0098/0110

AUTHOR: Gridnev, V. N.; Yefimov, A. I.; Kushnareva, N. P.; Khazanov, M. S.

TITLE: Structural changes during nonstationary annealing of turbine blades made of cast heat-resistant alloys on a nickel base

SOURCE: AN UkrRSR. Insty*tut metalofizy*ky*. Sbornik nauchny*kh trudov, no. 17, 1963. Voprosy*fiziki metallov i metallovedeniya, 98-110

TOPIC TAGS: cracking, fissure turbine blade, gas turbine, thermal fatigue, heat-resistant alloy, cast alloy, thermocyclic stress, cyclic heat treatment, nonstationary annealing

ABSTRACT: Turbine blades work under conditions of a non-stationary temperature field. Thermal stresses which occur during starting up and shutting down lead to premature deterioration of the blades, because of the appearance and development of fractures due to thermal fatigue. In a number of studies it has been shown that surface layers play a decisive role in the resistance of heat-resisting alloys at high temperatures and in conditions of non-stationary annealing. The present study is devoted to the examination of structural changes in surface layers and in the internal zones of samples and blades made from cast alloys of complex components. Blades tested for thermal fatigue were studied.

Card 1/3

ACCESSION NR: AT4010694

Samples were annealed at 1000C for 30 seconds, exposed in a furnace for 4 minutes, and cooled in an air stream or water. Structural changes were studied by optical and electro-microscopic methods. The study of the structural state of samples subjected to cyclic treatment showed no noticeable changes in carbide components. There was no noticeable change between structures of the central and surface parts. No microfractures were noticed even after 400 cycles with cooling in an air stream. Stresses during such treatment were not sufficient to cause flaws. The study of the microstructure in the region of cracks showed that fracturing in the alloys occurs mostly along the lines of grain. In some cases one could see that the initial stage of decomposition was a sharp disintegration, which took the form of fractures along the lines of grains of the cellular structure. It appears that as a result of cyclic loads, defects were concentrated in these regions, which at certain stages caused the appearance of microfissures. The fact that the appearance of cracks was always connected with the formation of cellular structure made it necessary to determine under what conditions such a structure was formed, what its nature was, and what role it played in the appearance of cracks. It was found that cellular structure appeared in the region of 1180-1200C. Further increase in temperature speeded up the process of its formation. The rate of cooling had a definite effect. The greater the rate the more pronounced the cellular structure was. Until now one could only conjecture that the

Card 2/3

ACCESSION NR: AT4010694

formation of cellular structures might hasten the appearance of microcracks, which cracks could lead to the deterioration of blades. "Specimens which had been subjected to cyclic heat treatment were provided by V. I. Borisova." Orig. art. has: 6 figures.

ASSOCIATION: Insty*tut metalofizy*ky* AN UkrRSR (Institute of Metallurgical Physics AN UkrRSR)

SUBMITTED: 00

DATE ACQ: 31Jan64

ENCL: 00

SUB CODE: MM, PR

NO REF SOV: 005

OTHER: 001

Card 3/3

L 8565-63 EPA/EWT(m)/EPF(n)-2/EPR/T-2/EPA(bb)-2/EWP(pb)-2/EWP(q)/EWP(h)/
~~EWP(r)~~ Paa-4/Pe-4 APTC(a)/ASD(a)/ASD(p)-3/AEDC(b)/AFETR JD/NW/ER
 ACCESSION NR: AT4042832 S/2601/64/000/018/0047/0053

AUTHOR: Gridnev, V. N. (Corresponding member AN UkrSSR); Yefimov, A. I.;
 Kushnareva, N. P.; Khazanov, M. S.

TITLE: Behavior of stator blades under conditions of steady and non-
 steady heating

SOURCE: An UkrSSR. Institut metallofiziki. Sbornik nauchnykh rabot,
 no. 18, 1964. Voprosy fiziki metallov i metallovedeniya (Problems in
 the physics of metals and physical metallurgy), 47-53

TOPIC TAGS: gas turbine, gas turbine blade, gas turbine stator blade,
 blade thermal fatigue, thermal fatigue resistance, rotor blade ther-
 mal fatigue

ABSTRACT: Gas-turbine stator blades, cast from an Ni-Cr alloy (un-
 identified), were held at 1000C for 100, 200, or 500 min, and then
 subjected to cyclic heat treatment, heating to 1200C in 30 sec, hold-
 ing at 1200C for 30 sec, and cooling in the air stream to 50C in
 60 sec, all in an atmosphere similar to that existing in a real oper-
 ating gas turbine. The action of an aggressive gas stream at a con-
 stant temperature of 1000C produced on blade surfaces a thin white
 layer 1/3

L 8565-65

ACCESSION NR: AT4042832

layer free of the usual particles of the precipitated γ' -phase. The thickness of the layer varied with the location on the blade, and it increased slightly as the time of heating at 1000C was increased. The appearance of the white layer can be associated with the depletion of the alloying elements in the surface layers. No appreciable difference in the quantity, shape, and distribution of the γ' -phase particles was observed in the inner portions of the blade. The blades had almost uniform microhardness along the entire cross section. The thermal-fatigue resistance of such blades is much lower than that of the blades in the initial condition. Thermal-fatigue cracks in the blades heated at 1000C for 100 and 200 min appeared after 50 and 25 thermal cycles, respectively, compared with 150 cycles for the blade in the initial condition. The cracks always appear on the leading edge of the blade. They originate at and develop along the grain boundaries. Low thermal fatigue of the previously heated blades is assumed to be associated with the deterioration of the mechanical strength of the surface layers and with additional stresses resulting from unequal coefficients of expansion of the outer and inner portions of the blade. The thermal-fatigue resistance, however, can be appreciably increased by mechanical polishing. For example, a

Card 2/3

L 8565-65

ACCESSION NR: AT4042832

thermal-fatigue resistance of 25 cycles, which a blade had after heating at 1000C for 200 min, increased to 100 cycles after mechanical polishing of the entire surface and to 220 cycles after a second polishing. Orig. art. has: 7 figures.

ASSOCIATION: Institut metallofiziki AN UkrSSR (Physics of Metals Institute, AN UkrSSR)

SUBMITTED: 18Mar63

ATD PRESS: 3096

ENCL: 00

SUB CODE: PR

NO REF SOV: 006

OTHER: 001

Card 3/3

ACCESSION NR: AT4042833

S/2601/64/000/018/0054/0059

AUTHOR: Arbuzova, I. A., Kushnareva, N. P.

TITLE: The nature of the cellular structure in Ni-based heat resistant alloys

SOURCE: AN UkrSSR. Institut metallofiziki. Sbornik nauchny*kh rabot, no. 18, 1964.
Voprosy* fiziki metallov i metallovedeniya (Problems in the physics of metals and physical metallurgy), 54-59

TOPIC TAGS: nickel based alloy, heat resistant alloy, gas turbine blade, blade surface coating, blade thermal fatigue test, blade surface cellular structure, crystallographic matrix plane, Laue method, gnomonic crystal projection, alloy structure

ABSTRACT: The authors discuss the cellular structure seen in the surfaces of gas turbine blades after thermal fatigue tests as the result of cracking of the surface coating (formed in the process of anodic etching) while it dries. They used the Laue procedure (back reflection, optical methods), constructed a gnomonic projection (see Fig. 1 in the Enclosure), found that the coating cracked along the crystallographic planes of the matrix (100), and

Card 1/3

ACCESSION NR: AT4042833

conclude that a direct relationship cannot be traced between grain substructure and cellular structure, but that the evident congruence of the directions of coating cracks and crystallographic matrix planes is related to the existence of orientation congruence between them and the fact that cracking follows defined crystallographic planes in the coating. "The authors express gratitude to V. N. Gridnev for his constant interest and evaluation of the results." Orig. art, has: 2 tables, 3 microphotos and 1 graph.

ASSOCIATION: Institut metallofiziki AN UkrSSR (Metallophysics Institute, AN UkrSSR)

SUBMITTED: 19Feb63

DATE ACQ: 19Aug64

ENCL: 01

SUB CODE: MM, PR

NO REF SOV: 004

OTHER: 004

Card 2/3

ACCESSION NR: AT4042833

ENCLOSURE: 01

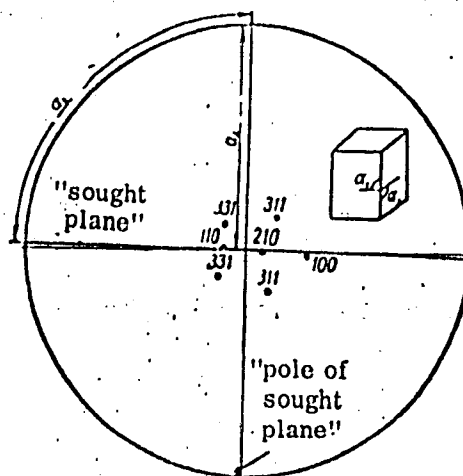


Fig. 1. Gnomonic projection of a crystal and the sought plane.

Card 3/3

L 44713-65 EWT(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(z)/EWP(b)/EWA(c) Pad
IJP(s) JD/HW

ACCESSION NR: AT5008871

S/2601/64/000/020/0052/0083

AUTHOR: Belouze, O.A.; Yefimov, A.I. Kushnareva, N.P.

TITLE: A study of the internal friction of nickel at high temperatures

SOURCE: AN UkrSSR. Institut metallofiziki. Sbornik nauchnykh trudov, no. 20, 1964.
Voprosy fiziki metallov i metallovedeniya (Problems in the physics of metals and
physical metallurgy), 52-63

TOPIC TAGS: nickel structure, nickel internal friction, high temperature internal
friction, nickel annealing, nickel purity, electron beam refining

ABSTRACT: The influence of grain size (annealing temperature) on the high-temperature
internal friction in nickel of various degrees of purity was investigated. The temperature
dependence of internal friction at 200-900C was studied by means of a torsion pendulum
in a vacuum at 10^{-4} - 10^{-5} mm Hg. The degree of purity of annealed nickel was found to
affect the temperature at which the internal friction curves begin to rise: the higher
the nickel purity, the higher the temperature of this rise. In nickel of 99.9 and 99.99%
purity at 410-440C, a peak is observed on these curves which is attributed to stress
relaxation at the grain boundaries. An increase in grain size causes a lowering of the
boundary peak in all the grades of Ni considered. An increase in the content of impurities

Card 1/2

L 44713-65

ACCESSION NR: AT5008871

also lowers this peak, particularly up to 0.01%. In nickel prepared by electron-beam remelting (99.99% pure), two regions of maximum internal friction values are observed. In samples annealed up to 900C, the peak corresponds to 480C and its position does not change appreciably; this peak is thought to be due to stress relaxation at the grain boundaries. A rise in annealing temperature to 1200C causes an increase in the internal friction peak and its shift toward 600C; this peak is attributed to stress relaxation at the boundaries of the blocks. "In conclusion, the authors thank V.N. Gridnev for interest shown in this work and for discussion of the results. Nickel prepared by electron beam smelting was kindly provided by A.L. Tikhonovskiy of the Institut elektrosvarki im. Ye. O. Patona (Electric Welding Institute)." Orig. art. has: 5 figures.

ASSOCIATION: Institut metallofiziki, AN UkrSSR (Institute of the Physics of Metals, AN UkrSSR)

SUBMITTED: 10Apr64

ENCL: 00

SUB CODE: MM, TD

NO REF SOV: 009

OTHER: 010

INC-8
Card 2/2

L 04181-67

EWI(m)/I/EWP(t)/ETI/EWP(k)

LJP(c) JD/HW/GD

ACC NR: AT6026904

SOURCE CODE: UR/0000/66/000/000/0025/0032

AUTHOR: Belous, O. A.; Gridnev, V. N.; Yefimov, A. I.; Kushnareva, N. P.

ORG: none

TITLE: Effect of annealing temperature and purity on high temperature internal friction in nickel ²¹ ₁₆

SOURCE: AN SSSR. Institut metallurgii. Vnutrenneye treniye v metallakh i splavakh (Internal friction in metals and alloys). Moscow, Izd-vo Nauka, 1966, 25-32

TOPIC TAGS: internal friction, high temperature, temperature dependence, high purity metal, plastic deformation, impurity content, grain size, recrystallization, annealing

ABSTRACT: Internal friction in the 200-900°C range on deformed and annealed nickel of 99.9%, 99.99% and higher purity was studied. The nickel was drawn about 95% and the wire samples were annealed at different temperatures. Internal friction was measured on a torsion pendulum operated at 1.7-2 cps. Changes in internal friction are given as functions of test temperature for samples previously annealed at 300 to 1200°C. At 200°C the background was greatest for samples annealed at the lower temperatures as a result of the increased amount of crystal lattice defects. For all annealing temperatures, a grain boundary relaxation peak occurred at 410-430°C, the height of which de-

Card 1/3

L 04181-67

ACC NR: AT6026904

3
creased with rise in annealing temperature. In 99.9% nickel, the peak was unsymmetric-
al due to auxiliary relaxation processes occurring at 550-700°C. A metallographic exam-
ination showed that the recrystallization temperature of 99.9% nickel was 350°C. The
grain size of 99.9%, 99.99% and electron beam remelted nickel are given as a function
of annealing temperature. A heterogeneous grain structure was observed at 600-700°C.
The largest grain growth occurred in the purest material: electron beam remelted nic-
kel. In nickel of lower purity, the slow grain growth, even at an annealing tempera-
ture of 1200°C, was caused by the impedance of grain boundary migration due to impuri-
ties. The height of the grain boundary peak decreased with grain size and impurity
content. For 99.99% nickel, two internal friction peaks occurred, one at 400-440°C and
the other at 620-630°C. The heights of both peaks decreased with a rise in annealing
temperature or grain size. In 99.99% nickel, a heterogeneous grain structure was re-
crystallized at 600°C, at which point the height of the peaks dropped sharply. The
625°C peak height increased with a rise in internal friction heating rate. It also de-
creased monotonically as a result of maintaining the sample at 625°C for periods up to
1 hr during internal friction testing. This peak was related to secondary recrystalli-
zation in the 99.99% nickel since the activation energy of recrystallization was high-
er than that of grain boundary relaxation. In electron beam melted nickel an extreme
amount of background damping was observed in deformed samples. This damping became
negligible after annealing at 300°C. Only one peak, corresponding to grain boundary
relaxation, occurred in the 460-490°C range for the ultrapure nickel. However, anneal-

Card 2/3

L 04181-67

ACC NR: AT6026904

ing above 1000°C shifted this peak to the 600-625°C range. This change was associated with substructure formation under axial loading (25 g/mm²) imposed at the higher temperatures. Orig. art. has: 6 figures.

SUB CODE: 11,20/

SUBM DATE: 02Apr66/

ORIG REF: 009/

OTH REF: 006

Card 3/32C

ACC NR: AP6033049 SOURCE CODE: UR/0126/66/022/002/0227/0233

AUTHOR: Yefimov, A. I.; Kushnareva, N. P.; Statkevich, V. N.;
Trefilov, V. I.

ORG: Institute of Physics of Metals, AN UkrSSR (Institut metallofiziki
AN UkrSSR); Electric Welding Institute im. Ye. O. Paton, AN UkrSSR
(Institut elektrosvarki AN UkrSSR)

TITLE: Structure sensitivity of plastic properties of electron beam
melted molybdenum alloys

SOURCE: Fizika i metallov i metallovedeniye, v. 22, no. 2, 1966,
227-233

TOPIC TAGS: molybdenum, molybdenum alloy, molybdenum alloy structure,
molybdenum alloy, plasticity, METAL CRYSTAL

ABSTRACT: Specimens of electron-beam melted molybdenum and Mo-C-Ti
and Mo-B-Ti alloys have been subjected to bending tests in the as-cast
and annealed (in vacuum at 2000C for 1 hr) conditions. It was found
that the plasticity of molybdenum alloys depends, to a great degree,
on their structure. Specimens of pure molybdenum and Mo-C-Ti alloy cut
from the ingots along their longitudinal axes had crystals positioned
in the lengthwise direction and they were plastic. As-cast pure

Card 1/2

UDC: 548.4

ACC NR: AP6033049

molybdenum longitudinal specimens withstood bending to 180°, without failure, while annealed specimens failed at 150° in a transcrystalline manner. Specimens of Mo-C-Ti alloy broke at a 150—160° bending angle with a fracture along the grain. Specimens of pure molybdenum and Mo-C-Ti alloy cut across the ingot axis were predominantly brittle and broke at 0°, with the exception of annealed specimens which broke at 70—90°. All longitudinal and crosssectional specimens of Mo-B¹/Ti alloy were brittle, showing predominantly transcrystalline fracture. It was established that alloys with high plasticity have clearly developed fragmentation and a disorientation of substructure fragments of 2—4°. Orig. art. has: 4 figures and 1 table.

SUB CODE: 11/ SUBM DATE: 22Dec65/ ORIG REF: 010/ OTH REF: 018

Card 2/2

1. CORETSKII, YU.K. - KUSHNAREVA, T.I.
2. USSR (600)
4. Bauxite - Berdsk Region
7. Study of the lithology of the bauxite-bearing stratum and the mineralogy of the ore bed of the Berdsk deposits. (Abstract) Izv. Glav. upr. geol. fon. no. 2, 1947
9. Monthly List of Russian Accessions, Library of Congress, March 1953, Unclassified

KUSHNAREVA, T.I.

SOLNISEV, O.A.; KUSHNAREVA, T.I.

Timan-Pechora area. Trudy VNIGRI no.101:5-48 1972. (MLRA 10.9)
(Timan Ridge--Geology) (Pechora Valley--Geology)

KUSHNAREVA, T.I.

Stratigraphy, lithology, and oil potential of rocks overlying
the producing Devonian formation. Trudy VNIGRI no.133:81-93
'59. (MIRA 13:1)

(Timan Ridge--Petroleum geology)
(Pechora Valley--Petroleum geology)

KUSHNAREVA, T.I.; ROSSIN, Ya.D.

Recent data on the geological structure of the Pechora Depression. Dokl.AN SSSR 133 no.4:913-916 Ag '60.
(MIRA 13:7)
(Pechora Valley—Geology, Stratigraphic)

KUSHNAREVA, T.I.

Oil and gas resources of the Pechora Ridge. Dokl. AN SSSR 135 no.1:
155-157 N'60. (MIRA 13:11)

1. Tsentral'naya nauchno-issledovatel'skaya laboratoriya
Ukhtinskogo kombinata. Predstavleno akademikom N.M.Strakhovym.
(Pechora Basin--Petroleum geology) (Pechora Basin--Gas, Natural--
Geology)

KUSHNAREVA, T.I.

Lithologic characteristics and conditions determining the formation of lower Famennian deposits in the Timan-Pechora area.
Izv.vys.ucheb.zav.;geol.i razv. 4 no.7:42-55 J1 '61. (MIRA 14:8)

1. Ukhtinskoye geologicheskoye upravleniye.
(Timan Ridge--Geology, Stratigraphic)

KUSHNAREVA, T.I.

Upper Famenian sediments in the Timan-Pechora region. Izv.vys.
ucheb.zav.; geol.i razv. 5 no.1:38-47 Ja '62. (MIRA 15:2)

1. Ukhtinskoye territorial'noye geologicheskoye upravleniye.
(Pechora Valley---Geology, Stratigraphic)
(Timan Ridge---Geology, Stratigraphic)

KUSHNAREVA, T.I.

Domanik facies of the Middle Frasnian basin in the Timan-Pechora
area. Izv.vys.ucheb.zav.; geol.i razv. 6 no.3:46-55 Mr '63.
(MIRA 16:5)

1. Ukhtinskoye geologicheskoye upravleniye.
(Pechora Valley---Geology, Stratigraphic)
(Timan Ridge---Geology, Stratigraphic)

TIMOFEYEV, B.V.; KUSHNAREVA, T.I.

Age of arcuate series in the northwestern region of the Timan Range.
Dokl. AN SSSR 158 no.3:613-614 S '64. (MIRA 17:10)

1. Vsesoyuznyy neftyanoy nauchno-issledovatel'skiy geologorazvedochnyy
Institut. Predstavleno akademikom D.V.Nalivkinym.

KUSANAREVA, T.I.; ZHURAVLEV, V.S.; ZARKH, V.F.; SAAR, A.A.

Stratigraphy and tectonics of the basement of the southwestern part
of the Timan Range region. Dokl. AN SSSR 162 no.3:632-635 My '65.
(MIRA 18:5)

1. Submitted January 28, 1965.

CATEGORY : Cultivated plants, potatoes, Vegetables,
 Cucurbits.
 ASS. JOURN. : Sel'skoye khoz-vo, No. 5, 1959, pp. 1-204
 AUTHOR : Kushnareva, V.V.
 INST. : Tadzhik Scientific Research Institute of
 TITLE : The Checkrow Planting of Potatoes and
 Cucurbits and Vegetable Crops.
 ORIG. PUB.: Byul. nauchno-tekhn. inform. Tadzh. n.-i,
 in-t sadovodstva vinogradarstva i subtrop.
 kul'tur, 1957, vyp. 1, 70-73
 ABSTRACT : These experiments were made from 1954 to 1956
 under irrigation. The following planting
 methods and bed areas are recommended for
 Tadzhik SSR: checkrow planting (60 x 60 cm)
 for potatoes planted in spring, in the summer
 planting --square placement 70 x 70 cm;
 for tomatoes and melon rectangular pocket
 planting with two plants to each hill, placed
 at a distance of $\frac{140 - 70}{2} \times 70$ centimeters ;
 Horticulture, Viticulture and Subtropical
 Crops.
 CARD: 1/2

COPY :
CATEGORY : Cultivated Plants.
ABS. JOUR.: Dokl. Zhur-Biologiya, No. 5, 1969, No. 20304

author :
INST. :
TITLE :

ORIG. PUB.:

ABSTRACT : and $\frac{210-70}{3}$ x 70 cm, respectively.

--Ye. M. Tsvetayeva

CARD : 2/2

SMOLKIN, E.A. ; KUSHNAREVICH, P.L.

Introduction of a catheter into the ureter during X-ray
contrast examination of the bladder. Urologiia 28 no.2:
57 Mr-Apr'63. (MIRA 16:6)

1. Iz urologicheskogo otdeleniya (zav. A.I.Yakimidi) Yuzhno-
Kazakhstanskoy oblastnoy bol'nitsy.
(BLADDER—RADIOGRAPHY)